

Application No. 10/755,243

Please cancel claims 13-20 without prejudice.

1. (currently amended) A drop emitting device comprising:
a first linear array of fluidically coupled first finger manifolds;
a second linear array of fluidically coupled second finger manifolds;

the first linear array of first finger manifolds and the second linear array of second finger manifolds being interleaved so as to be alternating along an X-axis and forming a composite linear array of finger manifolds that extends along the X-axis, and wherein the first finger manifolds and the second finger manifolds extend obliquely to the X-axis; and

respective pluralities of drop generators fluidically coupled to respective first finger manifolds and second finger manifolds, whereby a respective plurality of drop generators, each is fluidically coupled to oneeach of the first finger manifolds and the second finger manifolds.

2. (original) The drop emitting device of claim 1 wherein the first finger manifolds and the second finger manifolds are substantially mutually parallel.

3. (original) The drop emitting device of claim 1 wherein the drop generators comprise piezoelectric drop generators.

4. (original) The drop emitting device of claim 1 wherein each of the drop generators includes an ink pressure chamber that is behind the first finger manifolds and the second finger manifolds.

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5. (currently amended) The drop emitting device of claim 1 wherein the first finger manifolds and the second finger manifolds are substantially mutually parallel, and wherein ~~the~~each ~~respective~~ plurality of drop generators comprise a plurality of linear arrays ~~includes~~ includes a linear array of outlet channels that ~~are~~is substantially parallel to the first finger manifolds and the second finger manifolds.

6. (original) The drop emitting device of claim 1 wherein each of the plurality of drop generators is adjacent a finger manifold to which such drop generator is fluidically connected.

7. (original) The drop emitting device of claim 1 wherein the first finger manifolds receive ink of a first color, and wherein the second finger manifolds receive ink of a second color.

8. (original) The drop emitting device of claim 1 wherein the first finger manifolds receive magenta ink, and wherein the second finger manifolds receive cyan ink.

9. (original) The drop emitting device of claim 1 wherein the first finger manifolds receive yellow ink, and wherein the second finger manifolds receive black ink.

10. (original) The drop emitting device of claim 1 wherein the first finger manifolds and the second finger manifolds receive melted solid ink.

11. (original) The drop emitting device of claim 1 wherein the first finger manifolds, the second finger manifolds, and the plurality of drop generators are implemented in a laminar stack of metal plates.

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12. (original) The drop emitting device of claim 1 further including a first elongated primary manifold fluidically coupled to the first finger manifolds and a second elongated primary manifold fluidically coupled to the second finger manifolds, the first elongated primary manifold and the second elongated primary manifold extending generally along the X-axis.

Claims 13-20 (canceled)

21. (currently amended) A drop emitting device comprising:
a first linear array of fluidically coupled first finger manifolds, the first linear array extending along a first axis and the first finger manifolds being oblique to the first axis;
a second linear array of fluidically coupled second finger manifolds, the second linear array extending along the first axis and the second finger manifolds being oblique to the first axis;
the first linear array and the second linear array being interleaved to form a first composite linear array extending along the first axis;
a third linear array of fluidically coupled third finger manifolds, the third linear array extending along the first axis and the third finger manifolds being oblique to the first axis;
a fourth linear array of fluidically coupled fourth finger manifolds, the fourth linear array extending along the first axis and the fourth finger manifolds being oblique to the first axis;
the third linear array and the fourth linear array being interleaved to form a second composite linear array extending along the first axis;
the first composite linear array and the second composite linear array being side by side generally along a second axis that is orthogonal to the first axis and forming a 2-dimensional array of finger manifolds; and

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respective pluralities of drop generators fluidically coupled to respective first, second, third and fourth finger manifolds, whereby a respective plurality of drop generators, each is fluidically connected to each of the first, second, third and fourth finger manifolds.

22. (original) The drop emitting device of claim 21 wherein the first finger manifolds and the second finger manifolds are substantially mutually parallel, and wherein the third finger manifolds and the fourth finger manifolds are substantially mutually parallel.

23. (original) The drop emitting device of claim 21 wherein the first finger manifolds, the second finger manifolds, the third finger manifolds and the fourth finger manifolds are substantially mutually parallel.

24. (currently amended) The drop emitting device of claim 21 wherein the first finger manifolds, the second finger manifolds, the third finger manifolds and the fourth finger manifolds are substantially mutually parallel, and wherein some of the first finger manifolds are longitudinally aligned with some of the third finger manifolds, and wherein some of the second manifolds are longitudinally aligned with some of the fourth finger manifolds.

25. (original) The drop emitting device of claim 21 wherein the drop generators comprise piezoelectric drop generators.

26. (original) The drop emitting device of claim 21 wherein the drop generators respectively include an ink pressure chamber that is behind the finger manifolds and a nozzle that is in front of the first finger manifolds, the second finger manifolds, the third finger manifolds, and the fourth finger manifolds.

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27. (currently amended) The drop emitting device of claim 21 wherein the first finger manifolds, the second finger manifolds, the third finger manifolds and the fourth finger manifolds are substantially mutually parallel, and wherein the pluralityrespectivepluralities of drop generators comprise substantially mutually parallel columnar arrays of drop generators, and wherein the drop generators of a columnar array of drop generators is fluidically coupled the same finger manifold.

28. (original) The drop emitting device of claim 21 wherein each of the plurality of drop generators is adjacent a finger manifold to which they are fluidically connected.

29. (original) The drop emitting device of claim 21 wherein: the first finger manifolds receive ink of a first color; the second finger manifolds receive ink of a second color; the third finger manifolds receive ink of a third color; and the fourth finger manifolds receive ink of a fourth color.

30. (original) The drop emitting device of claim 21 wherein: the first finger manifolds receive magenta ink; the second finger manifolds receive cyan ink; the third finger manifolds receive yellow ink; and the fourth finger manifolds receive black ink.

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31. (original) The drop emitting device of claim 21 wherein:
the first finger manifolds and the second finger manifolds receive
ink of a first color; and
the third finger manifolds and the fourth finger manifolds receive
ink of a second color.

32. (original) The drop emitting device of claim 21 wherein the
first finger manifolds, the second finger manifolds, the third finger manifolds
and the fourth finger manifolds receive melted solid ink.

33. (original) The drop emitting device of claim 21 wherein the
first finger manifolds, the second finger manifolds, the third finger manifolds,
the fourth finger manifolds and the plurality of drop generators are
implemented in a laminar stack of metal plates.

34. (original) The drop emitting device of claim 21 further
including a first primary manifold fluidically coupled to the first finger
manifolds, a second primary manifold fluidically coupled to the second finger
manifolds, a third primary manifold fluidically coupled to the third finger
manifolds, and a fourth primary manifold fluidically coupled to the fourth finger
manifolds.

35. (currently amended) The drop emitting device of claim 21
further including a first elongated primary manifold fluidically coupled to the
first finger manifolds, a second elongated primary manifold fluidically coupled
to the second finger manifolds, a third elongated primary manifold fluidically
coupled to the third finger manifolds, and a fourth elongated primary manifold
fluidically coupled to the fourth finger manifolds, the first through fourth
elongated primary manifolds respectively extending along the first axis.

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36. (currently amended) The drop emitting device of claim 21 further including an elongated first primary manifold fluidically coupled to the first finger manifolds, an elongated second primary manifold fluidically coupled to the second finger manifolds, an elongated third primary manifold fluidically coupled to the third finger manifolds, and a fourth elongated primary manifold fluidically coupled to the fourth finger manifolds, the first and second elongated primary manifolds extending generally along the first axis and located on one side of the 2-dimensional array of finger manifolds that comprises the first through fourth finger manifolds, and the third and fourth elongated primary manifolds extending generally along the first axis and located on another side of the 2-dimensional array of finger manifolds that comprises the first through fourth finger manifolds.